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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 10/692,939
Filing Date: October 24, 2003
Appellant(s): LAMB ET AL.

Thomas W. Leffert (Reg. No. 40,697)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 8/12/09 appealing from the Office action

mailed 1/7/09.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial

proceedings which will directly affect or be directly affected by or have a bearing on the

Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection

contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

2002/0052727 A1	Bond et al	5-2002
5,889,954	Gessel et al.	3-1999
6,725,451 B1	Schuetz et al.	4-2004
H1,921	Fletcher et al.	11-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-11 and 14-32 are pending in this application.

Claim Objections

1.   **Claims 17-28 are objected to because of the following informalities:**

Claim 17 appears to include typographical error. Specifically, "…providing an application via an application layer having executable instructions to provide one or

more applications to operating system layer having executable instructions to provide a
first type of operating system and associated application program interfaces (APIs)..."
on lines 2-6 of claim 17 includes typographical error or is unclear because it is not clear
as to whether "...an application..." is different from "...one or more applications..." and
what relationship exist between the "...application layer..." and the "...first type of
operating system...".

For the purpose of this office action the Examiner would interpret "...providing an
application via an application layer having executable instructions to provide one or
more applications to operating system layer having executable instructions to provide a
first type of operating system and associated application program interfaces (APIs)..."
with "...providing an application layer having executable instructions that includes one
or more applications; providing an operating system layer having executable
instructions that include a first type of operating system and associated application
program interfaces (APIs)...".

Claim 23 appears to include typographical error. Specifically, "a" should have
preceded the term "first type of operating system" on line 2 of claim 23.

For the purpose of this office action the Examiner would interpret and insert "a"
before "first" and replace "a" with "the" on line 6 of claim 23.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

2.   Claims 17-22 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention.

        The following terms lack antecedent basis:

                i.   "the computing device" on line 8 of claim 17.

        For the purpose of this office action the Examiner would interpret and replace

"the computing device" with "a computing device"

                ii.   "the home location register application" on line 11 of claim 17.

        For the purpose of this office action the Examiner would interpret and replace

"the home location register application" with "a home location register application".

Claim Rejections - 35 USC § 102

        The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

3.   Claims 1-3, 5-7, 9 and 23-27 are rejected under 35 U.S.C. 102(e) as being

anticipated by U.S. Pub. No. 2002/0052727 A1 to Bond et al.

4.   As to claim 1, Bond teaches a computing device, comprising:

a processor (figure 6); and

memory having instructions stored therein, that are executable by the

processor (figure 6), to provide:

an application layer having executable instructions to provide one or more

applications (User Mode 310, Native Applications 312a/b/c, Non-Native Applications

314a/b page 4 paragraphs 0068-0070);

an operating system layer having executable instructions to provide a first type of

operating system and associated application program interfaces (APIs), wherein the

associated APIs include a first number of APIs for operating on the first type of

operating system that is resident on the computing device (Kernel Mode 330/Native

APIs 320/Native Kernel APIs 340 page 4 paragraphs 0068-0070/0073); and

an interface module coupled between the application layer and the operating

system layer (Native APIs 320/Non-Native APIs 322/Non-Native Kernel Emulator 400,

"…kernel emulator may have CPU simulator for different platforms…" page 5 paragraph

0082), wherein the interface module includes a second number of APIs for operating

with a second type of operating system that is different from the first type of operating

system (Non-Native APIS 322 page 4 paragraphs 0069-0071/0080) and wherein the

interface module receives program instructions from a program in the application layer

written for the second type of operating system and processes the instructions to select

either, one of the first number of APIs or one of the second number of APIs ("…directs

their calls to a non-native kernel…" page 4 paragraph 0071, "…Calls to the Kernel by

Non-Native Applications…" page 5 paragraphs 0085-0087, page 6 paragraphs 0103-

0110, Steps 510-520 page 7 paragraphs 0130).

5.   As to claim 2, Bond teaches the computing device of claim 1, wherein the

interface module includes an operating system emulation module for emulating a

number of operating system functions (Non-Native Kernel Emulator 400 page 3

paragraphs 0077-0081, page 5 paragraphs 0082-0087).

6.   As to claim 3, Bond teaches the computing device of claim 1, wherein the

interface module emulates operating system functions (Non-Native Kernel Emulator 400

page 3 paragraphs 0077-0081, page 5 paragraphs 0082-0087).

7.   As to claim 5, Bond teaches the computing device of claim 1, wherein the

interface module emulates intelligent network server functions ("…kernel emulator may

also be practiced in distributed computing environments…" page 8 paragraphs

0145/0146).

8.   As to claim 6, Bond teaches the computing device of claim 1, wherein the

interface module has portions for emulating the operating system functions (Non-Native

Kernel Emulator 400 page 3 paragraphs 0077-0081, page 5 paragraphs 0082-0087)

and the network server functions in discrete modules located within the interface

module ("...kernel emulator may also be practiced in distributed computing

environments..." page 8 paragraphs 0145/0146).

9.   As to claim 7, Bond teaches the computing device of claim 1, wherein the

interface module processes a program instruction by interpreting whether the instruction

has to be processed further (Non-Native Kernel Emulator 400 page 4 paragraphs

0060/0077-0081, page 5 paragraphs 0082-0087, page 6 paragraphs 0103-0114, page 7

paragraphs 0129-0134).

        As to claim 9, Bond teaches the computing device of claim 7, wherein the

application interface module translates the instruction received such that the operating

system can execute the instruction ("...directs their calls to a non-native kernel..." page

4 paragraph 0071, "...Calls to the Kernel by Non-Native Applications..." page 5

paragraphs 0085-0087, page 6 paragraphs 0103-0110, Steps 510-520 page 7

paragraphs 0130).

10.   As to claim 23, Bond teaches a method of executing an application (User Mode

310, Non-Native Applications 314a/b) configured for a platform having a first type of

operating system on a platform having a second type of operating system (Kernel Mode

330/Kernel Functions 333) comprising:

        communicating instructions from the application to an interface module (Native

APIs 320/Non-Native APIs 322/Non-Native Kernel Emulator 400, "...kernel emulator

may have CPU simulator for different platforms…" page 5 paragraph 0082), the

application configured for the first type of operating system ("…directs their calls to a

non-native kernel…" page 4 paragraph 0071, "…Calls to the Kernel by Non-Native

Applications…" page 5 paragraphs 0085-0087, page 6 paragraphs 0103-0110, Steps

510-520 page 7 paragraphs 0130);

interpreting the instructions from the application with the interface module by

receiving program instructions from the application and processing the instructions to

select either, one of a first number of APIs that are designed for use of the application

on the first type of operating system and wherein the first number of APIs are resident

on an operating system layer or one of a second number of APIs that are designed for

use of the application on the second type of operating system and wherein the second

number of APIs are resident on the interface module ("…the emulator kernel

interprets…" page 4 paragraph 0060, "…Calls to the Kernel by Non-Native

Applications…" page 5 paragraphs 0085-0087, page 6 paragraphs 0103-0110, Steps

510-520 page 7 paragraphs 0130); and

communicating the instructions from the interface module to an operating system

that is the second type of operating system ("…passes the translated calls onto the

native kernel…" page 5 paragraph 0087).

11.   As to claim 24, Bond teaches the method of claim 23, wherein communicating

instructions from the application to an interface module includes communicating

instructions to an operating system emulation module within the interface module

("...directs their calls to a non-native kernel..." page 4 paragraph 0071, "...Calls to the

Kernel by Non-Native Applications..." page 5 paragraphs 0085-0087, page 6

paragraphs 0103-0110, Steps 510-520 page 7 paragraphs 0130).

12.   As to claim 25, Bond teaches the method of claim 24, wherein interpreting the

instructions includes directing an instruction from the operating system emulation

module to an application program interface ("...the emulator kernel interprets..." page 4

paragraph 0060, "...Calls to the Kernel by Non-Native Applications..." page 5

paragraphs 0085-0087, page 6 paragraphs 0103-0110, Steps 510-520 page 7

paragraphs 0130).

13.   As to claim 26, Bond teaches the method of claim 23, wherein communicating

instructions from the application to an interface module includes communicating

instructions to a network server emulation module within the interface module ("...kernel

emulator may also be practiced in distributed computing environments..." page 8

paragraphs 0145/0146).

14.   As to claim 27, Bond teaches the method of claim 23, wherein interpreting the

instructions includes translating an instruction configured for the first type of operating

system to an instruction configured for the second type of operating system (Non-Native

Kernel Emulator 400 page 4 paragraphs 0060/0077-0081, page 5 paragraphs 0082-

0087, page 6 paragraphs 0103-0114, page 7 paragraphs 0129-0134).

15.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Pub. No. 2002/0052727 A1 to Bond et al. in view of U.S. Pat. No. 5,889,954 issued

to Gessel et al.

16.   As to claim 4, Bond is silent with reference to the computing device of claim 1,

wherein the interface module emulates home location register functions.

        Gessel teaches the computing device of claim 1, wherein the interface module

emulates home location register functions ("..."emulator"..." Col. 5 Ln. 10 – 20,

Emulator-3 (14) Col. 5 Ln. 39 – 45).

        It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Bond with the teaching of Gessel because

the teaching of Gessel would improve the system of Bond by allowing for a central

database that contains details of service subscribers that are authorized to use phone

service core network.

17.   Claims 8 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Pub. No. 2002/0052727 A1 to Bond et al. in view of U.S. Pat. No.

6,725,451 B1 issued to Schuetz et al.

18.   As to clam 8, Bond is silent with reference to the computing device of claim 7,

wherein the interface module converts a result received from the operating system layer

such that the converted result is in a format that the application program can use to

execute the instruction ("…Result values…" Col. 4 Ln. 1 – 9).

        Schuetz teaches the computing device of claim 7, wherein the interface module

converts a result received from the operating system layer such that the converted

result is in a format that the application program can use to execute the instruction

("…Result values…" Col. 4 Ln. 1 – 9).

        It would have been obvious to one of ordinary skill the art the time the invention

was made to modify the system of Bond with the teaching of Schuetz because the

teaching of Schuetz would improve the system of Bond by allowing a client application

to receive responses advising the client application concerning the processing by a

secondary component/station of one or more command frames or client application

request(s).

19.   As to claim 28, Schuetz teaches the method of claim 23, wherein interpreting the

instructions includes converting a result configured for the second type of operating

system to a result configured for the first type of operating system ("…Result values…"

Col. 4 Ln. 4 – 8).

        It would have been obvious to one of ordinary skill the art the time the invention

was made to modify the system of Bond with the teaching of Schuetz because the

teaching of Schuetz would improve the system of Bond by allowing a client application

to receive responses advising the client application concerning the processing by a

secondary component/station of one or more command frames or client application

request(s).

20.   **Claims 10, 11, 14-18, 20, 22 and 29-32 are rejected under 35 U.S.C. 103(a) as**

being unpatentable over U.S. Pub. No. 2002/0052727 A1 to Bond et al. in view of

U.S. Statutory Invention Registration No. H1,921 to Fletcher et al.

21.   As to claim 10, Bond teaches a system architecture, comprising:

a computing device including:

        a processor (figure 6) and

        memory having instructions stored therein, that are executable by the processor

(figure 6), to provide:

        an application layer having executable instructions to provide one or more

applications (User Mode 310, Native Applications 312a/b/c, Non-Native Applications

314a/b page 4 paragraphs 0068-0070);

        an operating system layer having executable instructions to provide a first type of

operating system and associated application program interfaces (APIs), wherein the

associated APIs include a first number of APIs for operating on the first type of

operating system that is resident on the computing device (Kernel Mode 330/Native

APIs 320/Native Kernel APIs 340 page 4 paragraphs 0068-0070/0073); and

an interface module (Native APIs 320/Non-Native APIs 322/Non-Native Kernel

Emulator 400, "…kernel emulator may have CPU simulator for different platforms…"

page 5 paragraph 0082) coupled between the application layer and the operating

system layer, wherein the interface module includes a second number of APIs for

operating the application with a second type of operating system that is not the type of

operating system resident on the computing device (Non-Native APIS 322 page 4

paragraphs 0069-0071/0080) and wherein interface module receives program

instructions from the application in the application layer written for the second type of

operating system and processes the instructions to select either one of the first number

of APIs or one of the second number of APIs ("…directs their calls to a non-native

kernel…" page 4 paragraph 0071, "…Calls to the Kernel by Non-Native Applications…"

page 5 paragraphs 0085-0087, page 6 paragraphs 0103-0110, Steps 510-520 page 7

paragraphs 0130).

Bond is silent with reference to Bond is silent with reference to an application

layer having a home location register application and a connection for connecting the

computing device to a publicly switched telephone network (PSTN).

Fletcher teaches an application layer having a home location register application

(Client Layer 310 Col. 7 Ln. 58 – 67, "…originating object…" Col. 11 Ln. 14 – 47) and a

connection for connecting the computing device to a publicly switched telephone

network (PSTN) (Switched Network 106 Col. 5 Ln. 60 – 67).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Bond with the teaching of Fletcher because

the teaching of Fletcher would improve the system of Bond by allowing for a central

database that contains details of service subscribers that are authorized to use phone

service core network.

22.   As to claim 11, Bond teaches the system architecture of claim 10, wherein the

interface module has a number of modules to translate instructions between the

operating system layer and the application layer (Non-Native Kernel Emulator 400 page

4 paragraphs 0060/0077-0081, page 5 paragraphs 0082-0087, page 6 paragraphs

0103-0114, page 7 paragraphs 0129-0134).

23.   As to claim 14, Bond teaches the system architecture of claim 10, wherein

interface layer includes an operating system emulation module that includes translation

and interpretation information therein (Non-Native Kernel Emulator 400 page 4

paragraphs 0060/0077-0081, page 5 paragraphs 0082-0087, page 6 paragraphs 0103-

0114, page 7 paragraphs 0129-0134).

24.   As to claim 15, Bond teaches the system architecture of claim 10, wherein the

system architecture further includes an operating system emulation module to direct art

instruction from the application to an application program interface (Non-Native Kernel

Emulator 400 page 4 paragraphs 0060/0077-0081, page 5 paragraphs 0082-0087, page

6 paragraphs 0103-0114, page 7 paragraphs 0129-0134).

25.   As to claim 16, Bond teaches the system architecture of claim 10, wherein the

system architecture further includes a number of component modules that can interface

between an application designed for a second type of operating system and the

operating system layer having a first type of operating system (Non-Native Kernel

Emulator 400 page 4 paragraphs 0060/0077-0081, page 5 paragraphs 0082-0087, page

6 paragraphs 0103-0114, page 7 paragraphs 0129-0134).

26.   As to claim 17, see the rejection of claim 10 above.

27.   As to claim 18, Bond teaches the method of claim 17, wherein processing the

instructions from the application with the interface module includes using a list of

instructions to be processed (Non-Native Kernel Emulator 400 page 4 paragraphs

0060/0077-0081, page 5 paragraphs 0082-0087, page 6 paragraphs 0103-0114, page 7

paragraphs 0129-0134).

28.   As to claim 20, Bond teaches the method of claim 17, wherein the application is

configured for a Windows based operating system ("...Microsoft..." page 1 paragraph

0004/0005, page 3 paragraph 0053).

29.   As to claim 22, Bond teaches the method of claim 17, wherein the method further

includes identifying instructions to be translated by the interface module (Non-Native

Kernel Emulator 400 page 4 paragraphs 0060/0077-0081, page 5 paragraphs 0082-

0087, page 6 paragraphs 0103-0114, page 7 paragraphs 0129-0134).

30.   As to claim 29, Bond teaches a computer readable medium having a set of

computer executable instructions thereon for causing a device to perform a method,

comprising:

       communicating instructions from an application to an interface module, the

application configured for a first type of operating system APIs ("...directs their calls to a

non-native kernel..." page 4 paragraph 0071, "...Calls to the Kernel by Non-Native

Applications..." page 5 paragraphs 0085-0087, page 6 paragraphs 0103-0110, Steps

510-520 page 7 paragraphs 0130);

       processing the instructions from the application with the interface module by

receiving program instructions from the and processing the instructions to select either,

one of a first number of application programming interfaces (APIs) that are designed for

use of the application on the first type of operating system and wherein the first number

of APIs are resident on an operating system layer or one of a second number of APIs

that are designed for use of the application on a second type of operating system and

wherein the second number of APIs are resident on the interface module ("...directs

their calls to a non-native kernel..." page 4 paragraph 0071, "...Calls to the Kernel by

Non-Native Applications..." page 5 paragraphs 0085-0087, page 6 paragraphs 0103-

0110, Steps 510-520 page 7 paragraphs 0130) and

communicating the instructions from the interface module to an operating system

that is a second type of operating system ("...passes the translated calls onto the native

kernel..." page 5 paragraph 0087).

Bond is silent with reference to a telecommunication application configured for a

first type of operating system.

Flecther teaches a telecommunication application configured for a first type of

operating system (Client Layer 310 Col. 7 Ln. 58 – 67, "...originating object..." Col. 11

Ln. 14 – 47).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Bond with the teaching of Fletcher because

the teaching of Fletcher would improve the system of Bond by allowing for a central

database that contains details of service subscribers that are authorized to use phone

service core network.

31.   As to claim 30, Bond teaches the computer readable medium of claim 29,

wherein communicating instructions from an application to an interface module includes

communicating to an abstraction module within the interface module (Non-Native Kernel

Emulator 400 page 4 paragraphs 0060/0077-0081, page 5 paragraphs 0082-0087, page

6 paragraphs 0103-0114, page 7 paragraphs 0129-0134).

32.   As to claim 31, Bond teaches the computer readable medium of claim 29,

wherein communicating instructions from an application to an interface module includes

communicating instructions to a component module within the interface module (Non-

Native Kernel Emulator 400 page 4 paragraphs 0060/0077-0081, page 5 paragraphs

0082-0087, page 6 paragraphs 0103-0114, page 7 paragraphs 0129-0134).

33.   As to claim 32, Bond teaches the computer readable medium of claim 29,

wherein the method further includes identifying instructions to be converted by the

interface module (Non-Native Kernel Emulator 400 page 4 paragraphs 0060/0077-0081,

page 5 paragraphs 0082-0087, page 6 paragraphs 0103-0114, page 7 paragraphs

0129-0134).

34.   Claims 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over U.S. Pub. No. 2002/0052727 A1 to Bond et al. in view of U.S. Statutory

Invention Registration No. H1,921 to Fletcher et al. as applied to claim 17 above,

and further in view of U.S. Pat. No. 6,725,451 B1 issued to Schuetz et al.

35.   As to claim 19, Fletcher and Bond are silent with reference to the method of

claim 17, wherein the application is configured for a Linux based operating system.

        Schuetz teaches the method of claim 17, wherein the application is configured for

a Linux based operating system ("…UNIX system call…" Col. 8 Ln. 26 – 38).

        It would have been obvious to one of ordinary skill the art the time the invention

was made to modify the system of Fletcher and Bond with the teaching of Schuetz

because the teaching of Schuetz would improve the system of Fletcher and Bond by

providing a portable, multi-tasking and multi-user in a time-sharing configuration of an

operating system environment and client-server program model where essential

elements in the development of the Internet and the reshaping of computing as

centered in networks rather than in individual computers.

36.   As to claim 21, Schuetz teaches the method of claim 17, wherein the application

is configured for a UNIX based operating system ("...UNIX system call..." Col. 8 Ln. 26

– 38).

It would have been obvious to one of ordinary skill the art the time the invention

was made to modify the system of Fletcher and Bond with the teaching of Schuetz

because the teaching of Schuetz would improve the system of Fletcher and Bond by

providing a portable, multi-tasking and multi-user in a time-sharing configuration of an

operating system environment and client-server program model where essential

elements in the development of the Internet and the reshaping of computing as

centered in networks rather than in individual computers.

(10) Response to Argument

Appellant argues in substance that (1) the objection of claim 17 is improper

because it is clear from the claim that "the application layer has executable instructions

to provide one or more applications to an operating system layer, and the application

being provided by the application layer is one of those one or more applications" (2) the

objection to claim 23 is improper because the omission of the term "a" (i.e. "a" should

have preceded "first operating system" on line 2) is a minor error, (3) claim 17 lacks

antecedent basis and should be amended as suggested by the Examiner, (4) the 112

2nd rejection of claim 23 should be withdrawn because there is no lack of antecedent

basis regarding the term "the application" on line 7 and (5) the Bond prior art does not

teach "an interface module coupled between the application layer and the operating

system layer, wherein the interface module includes a second number of APIs for

operating with a second type of operating system that is different from the first type of

operating system and wherein the interface module receives program instructions from

a program in the application layer written for the second type of operating system and

processes the instructions to select either, one of the first number of APIs or one of the

second number of APIs".

The Examiner respectfully traverses Appellant arguments:

As to points (1) and (2), the Appellant is arguing the objection to claims 17-28,

however, while a rejection involves the merits of the claim and subject to review by the

Board of Patent Appeals and Interferences, an objection, if persisted, may be reviewed

only by way of petition to the Director of the USPTO. Objection is only subject to

supervisory review by petition under 37 CFR 1.181.

As to point (3), the Examiner rejected claim 17 for lack of antecedent basis.

Specifically, the Examiner indicated that "the computing device" on line 8 and "the home

location register application" on line 11 lack antecedent basis. The Appellant is

requesting that the claim language be interpret and amended as indicated by the

Examiner.

The rejection will be maintained but it is acknowledge that the Appellant has given authorization to fix the problem once the other issues are resolved.

As to point (4), in view of the Appellant's argument the Examiner is withdrawing the 112 2nd. rejection.

As to point (5), the Bond prior art discloses a process for facilitating the operation of native and non-native program modules **(Native Applications 312a-c/Non-Native Applications 314a-c: NOTE: functionally equivalent to the claimed application layer of one or more applications)** within a native computing platform/ operating system **(Kernel 330: NOTE: functionally equivalent to the claimed operating system layer)** and allows interoperability of the native and non-native program modules within the native computing platform/operating system. Specifically, this process involves native program modules APIs **(Native APIs 320: NOTE: functionally equivalent to the claimed interface module of first number of APIs and coupled between the application layer and operating system, see figure 3)** and non-native program modules APIs **(Non-Native APIs 322/Non-Native Kernel Emulator 400: NOTE: functionally equivalent to claimed interface module of second number of APIs and coupled between the application layer and operating system, see figure 3 and page 4 paragraph 0079)**. This kernel emulator handles the necessary conversions and translations (page 5 paragraphs 0087) for non-native program modules calls or requests. With this kernel emulation, native and non-native program modules are interoperable. The combination of the native program modules APIs (Native APIs 320) and the kernel emulation (Non-Native Kernel Emulator 400)

allow the native and non-native program modules to access seamlessly communicate

with the operating system/native kernel.

This notwithstanding and importantly, the kernel emulator may also provide

processor simulators (CPU simulators) for different platforms (page 5 paragraph 0082).

This implies that the kernel emulator allows different applications (native and non-native

applications) to communicate with plural platforms/operating system by selecting or

finding the processor simulator for the target platform/operating system.

When an application (program modules) is loaded/initialized for execution or

makes a call **(e.g. API call: NOTE: functionally equivalent to the claimed receiving**

program instructions for a program in the application layer), the application type is

first determined (i.e. determining whether it is a native or non-native application). If it is a

native application, the native program modules APIs is selected and implemented in

order to access or communicate with the operating system/kernel **(figure 5 Step 530:**

NOTE: functionally equivalent to processing the instructions to select the first

number of APIs), however if it is a non-native application, the CPU simulator including

a translator (Translator 412) is selected and implemented in order to access or

communicate with the operating system/kernel **(figure 5 Step 514: NOTE: functionally**

equivalent to processing the instructions to select the second number of APIs).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the

Related Appeals and Interferences section of this examiner's answer.

Conferees:

/Hyung S. Sough/
Supervisory Patent Examiner, Art Unit 2194
11/09/09

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Supervisory Patent Examiner, Art Unit 2193

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